Time Range Configuration Commands

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Chapter 1 Time Range Configuration Commands

1.1 Time Range Configuration Commands

Time Range Configuration Commands include:

- absolute
- periodic
- show time-range
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1.1.1 absolute

Syntax

To add or modify the absolute time in Time Range sub-mode, run the following command. To return to the default setting, use the no form of this command.

absolute { start *hour:minute day month year* **end** *hour:minute day month year*

        | start *hour:minute day month year*

        | end *hour:minute day month year* **}**

[no] absolute { start *hour:minute day month year* **end** *hour:minute day month year*

        | start *hour:minute day month year*

        | end *hour:minute day month year* **}**

Parameters

Parameters	Description
hour	Hour in 24 hour system.
minute	minute
day	day
month	month
year	year

Default Value

There is no default absolute time.

Command Mode

Time Range sub-mode

Usage Guidelines

The absolute time takes effect from the current time if the start time is not configured;

The absolute time is valid forever if the end time is not configured.

One time range can only have one absolute time. If the absolute time is already existed, the command can be used to modify it.

Example

The following example shows how to configure the absolute time in the time range sub-mode.

Switch_config_time_range_x#absolute start 8:08 8 8 2008 end 11:08　3 3 2010
Switch_config_tr# absolute start 8:08 8 8 2008 end 11:08　3 3 2010

Related Command

time-range

periodic

1.1.2　periodic

Syntax

To add or modify the absolute time in Time Range sub-mode, run the following command. To return to the default setting, use the no form of this command.

periodic { daily *hour:minute* **to** *hour:minute*

　　　　　| weekdays *hour:minute* **to** *hour:minute*

　　　　　| weekend *hour:minute* **to** *hour:minute*

　　　　　| {Friday | Monday | Saturday | Sunday | Thursday | Tuesday | Wednesday} *hour:minute* **to** *hour:minute*

| {Friday | Monday | Saturday | Sunday | Thursday | Tuesday | Wednesday} *hour:minute* **to {Friday | Monday | Saturday | Sunday | Thursday | Tuesday | Wednesday}** *hour:minute* **}**

[no] periodic { daily *hour:minute* **to** *hour:minute*

　　　　　| weekdays *hour:minute* **to** *hour:minute*

　　　　　| weekend *hour:minute* **to** *hour:minute*

　　　　　| {Friday | Monday | Saturday | Sunday | Thursday | Tuesday | Wednesday} *hour:minute* **to** *hour:minute*

　　　　　| {Friday | Monday | Saturday | Sunday | Thursday | Tuesday | Wednesday} *hour:minute* **to {Friday | Monday | Saturday | Sunday | Thursday | Tuesday | Wednesday}** *hour:minute* **}**

Parameters

Parameters	Description
hour	Hour in 24 hour system.
minute	minute

Default Value

There is no default absolute time.

Command Mode

Time Range sub-mode

Usage Guidelines

The command can be used to configure the same item.

Example

The following example shows how to add a period from 09:00 on Monday to 18:00 on Friday.
Switch_config_time_range_x#periodic monday 09:00 to friday 18:00

The following example shows how to add a period from 12:00 to 13:00 every Tuesday, Thursday and Sunday.
Switch_config_time_range_x#periodic tuesday wednesday sunday 12:00 to 13:00

The following example shows how to add a period from 18:00 to 21:00 every workday.
Switch_config_time_range_x#periodic weekdays 18:00 to 21:00

Related Command

time-range

absolute

1.1.3   show time-range

Syntax

To show the configuration of Time Range, run the following command.   All configurations of Time Range will be shown in the system if the name is not specified. Otherwise, only TimeRange of specified name will be shown.

show time-range [*name***]**

Parameters

Parameters	Description
name	The character string of the Time Range name. The value ranges from 1 to 20 characters.

Default Value

All Time Range configurations will be shown by default.

Command Mode

Other modes except the user mode

Usage Guidelines

The result analysis of the command:

Take the result of the typical configuration as an example:

```
Switch_config#show time-range


Now: Date: 2016.3.2      Time: 13:16      Day: Tuesday


time-range entry: x (inactive)
        absolute start 12:00 1 January 2000 end 13:00 2 January 2016
        periodic weekdays    09:00 to 18:00
time-range entry: y (empty)
time-range entry: z (active)
        periodic daily        12:00 to 13:00
        periodic Monday      Thursday   Friday      08:00 to 09:00
        periodic Saturday    15:00 to Sunday      20:00
        periodic daily        09:00 to 18:00
```

In the first line shows "Now: Date: 2016.3.2   Time: 13:16   Day: Tuesday", which means the date is 2rd March, 2016; the time is 13:16; the day is Tuesday.

Subsequently the screen shows the configuration and status of Time Ranges which named x, y and z respectively.   Time Range x has two items: absolute time and period, and it is in the inactive state; Time Range y has no item and it is in the empty state; Time Range z has 4 periods and it is in active state.

Example

The following example shows how to show the configuration of the time range named a.

Switch_config# **show time-range** *a*

Now: Date: 2016.3.2   Time: 14:01   Day: Tuesday

time-range entry: a (inactive)

periodic Monday   12:00 to 13:00

1.1.4   time-range

Syntax

To add a Time Range named name in the global configuration mode.   To return to the default setting, use the no form of this command.

time-range **name**

[no] time-range *name*

Parameters

Parameters	Description
name	The character string of the Time Range name. The value ranges from 1 to 20 characters.

Default Value

Time Range is not used by default.

Command Mode

Global configuration mode

Usage Guidelines

If the corresponding Time Range is not existed, a Time Range will be created in time range configuration mode; if the corresponding Time Range is already existed, it will enter the time range configuration mode directly.

Example

The following example shows how to configure a time range named a.

Switch_config# **time-range** *a*

1.1.5   debug time-range

To enable the debug switch of Time Range, run the above commands. To return to the default setting, use the no form of this command.

debug time-range

no debug time-range

Parameters

None

Default Value

The debug switch of the Time Range is disabled by default.

Command Mode

EXEC

Usage Guidelines

Time Range Debug Output Information Analysis

Take the typical debug output information as an example:

Switch_config_tr#Mar　2 14:01:18 Timerange(x) gains waiting second = 42949672

Mar　　2 14:01:18 Timerange(x) PRE_STATE: [INACTIVE], CUR_STATE: [INACTIVE], CHANGE: [unCHANGED]

Mar　2 14:01:18 Timerange(y) gains waiting second = 42949672

Mar　　2 14:01:18 Timerange(y) PRE_STATE: [EMPTY], CUR_STATE: [EMPTY], CHANGE: [unCHANGED]

Mar　2 14:01:18 Timerange(z) gains waiting second = 14408

Mar　　2 14:01:18 Timerange(z) PRE_STATE: [ACTIVE], CUR_STATE: [ACTIVE], CHANGE: [unCHANGED]

Mar　2 14:01:18 Timerange(X) gains waiting second = 424749

Mar　　2 14:01:18 Timerange(X) PRE_STATE: [INACTIVE], CUR_STATE: [INACTIVE], CHANGE: [unCHANGED]

Mar　2 14:01:18 Timerange(a) gains waiting second = 511149

Mar　　3 14:01:18 Timerange(a) PRE_STATE: [INACTIVE], CUR_STATE: [INACTIVE], CHANGE: [CHANGED]

Switch_config_tr#Mar　3 14:01:18 WHOLE time-range will be checked after waiting ticks = 1440800

The above information shows the current information of all Time Ranges. Their name are x, y, z, X or a.

The information "Mar　3 14:01:18 Timerange(x) gains waiting second = 42949672" means the time difference between 14:01:18, 3rd March and next moment of checking the effectiveness of Time Range x is 42949672 seconds.

The information "Mar　3 14:01:18 Timerange(x) PRE_STATE: [INACTIVE], CUR_STATE: [INACTIVE], CHANGE: [unCHANGED]"means at 14:01:18, 3rd March, the pre-state （PRE_STATE） of Time Range x is INACTIVE; the current state （CUR_STATE）is INACTIVE and the status is（unCHANGED）.

The information "Mar 3 14:01:18 WHOLE time-range will be checked after waiting ticks = 1440800" means the difference between 14:01:18, 3rd March and next check of Time Range of the whole system is 1440800 ticks. (tick is a time unit in the PC system; 1 tick=10ms)